

## ABSTRACT

The present invention provides a long-life discharge lamp by removing the causes of lowering the service life of the discharge lamp owing to quartz glass constituting the discharge lamp and a gas sealed therein, and also provides a discharge lamp production method wherein the mixing of impurities affecting the service life of the discharge lamp is prevented. In the discharge lamp the content of hydrogen, oxygen and their compounds existing in the light-emitting portion is such that the maximum intensity of the light-emitting spectral intensities of the above impurities is 1/1000 or less of the intensity of the main light-emitting spectrum of the noble gas when glow discharge occurs by supplying a current of 3 mA, and also the content of OH groups included in the quartz glass of the sealing portions is 5 ppm or less by weight.